THE SECTION
ACETYLENE MACHINE Co. Ltd.

A. W. PIERCE, President.

BYRON LIGHTFOOT, Managing Director

AYLMER, ONTARIO.

J. S. JENKIN,

Inventor and Sole Right for Manitoba and North-west

OFFICES AND WAREHOUSES
. . FOR THE WEST. . .

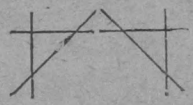
J. S. JENKIN,
DELORAINE, MAN.

P.O. Box 143. PHONE 99

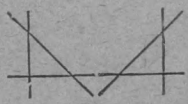
LOTY & McRAE,
CHAMBERS OF COMMERCE,
WINNIPEG.



No. 1. As the machine looks when working.



"The Section" Acetylene Machine.



Read How This Generator Came to be Invented.

THE INVENTOR, when he first commenced to study a practical Acetylene Generator, some thirteen years ago, came to the following conclusion that it was necessary for final success that a machine must be made

1 That could be placed anywhere,

2 That anyone could manage,

3 That it could be approached with a light, open or closed, without any danger of wrecking the machine.

At last his ideal has been reached, and to day there is such a machine on the Canadian market, as described above, called

The Section.

Therefore you are kindly requested to compare this machine with others before you make your purchase and you will find that you will be well paid for your investigation.

Acetylene Has Come to Stay.

The main thing that is needed now is a simple reliable and durable machine to generate the gas. What we claim for our machine is the fact that it has no valves to clog, or stop-cocks to get out of order, because it uses large lump carbide giving far greater percentage of gas per 100 lbs. than if the pea or rice is used. The slush is never run off into pails or distributed in the building, causing a very disagreeable odor, but is carried out in the receptacle in which the gas is generated. It is



No. 2. Showing a ground jointed door which needs no gaskets.



impossible for the gas to escape, except outside the building, even if the dome, for any reason, could not rise, or, if it should rise too high. It is made with two generators so that your machine never fails to give you a light, making it unnecessary to charge at night—fully complying with the FIRE UNDERWRITERS.

The following certificate shows that it is one of the few machines that has passed successfully the inspection of the Underwriters :

CANADIAN FIRE UNDERWRITERS' ASSOCIATION
Montreal and Toronto.

J. S. JENKIN, ESQ.,
BELLEVILLE, ONT. *October 6th*, 1901

DEAR SIR,

This is to certify that after examination by our inspector, the Section Acetylene Gas Generator manufactured by you and constructed in accordance with the plans and specifications in this office, has been accepted as fully complying with the standard requirements of the Association, as on revised rules of March 12th, 1901.

Yours truly,
ALF. J. W. HADRELL, SEC.

The above certificate for your machine will be recognized throughout the Provinces of Quebec, Ontario, Manitoba and Northwest.

Write for Estimates.

Number of Lights you require.
Number of Feet of Pipe.
Number of Two-light Chandeliers.
Number of One-light Pendants.
Number of One-light Wall Brackets.

We deal in up-to-date gas fixtures, burners, Acetylene stoves for heating and cooking.

One of the latest discoveries and a much needed convenience is the new system of lighting acetylene, that of the electric spark by which to-day you can light any jet in your house or barn without the use of a match, thus making it not only equal to incandescent electric light for convenience of lighting, but having a much better light, being the steadiest, whitest, softest artificial light known to-day, therefore the easiest on the eyes. Should you compare it with gasoline, you have none of its trouble such as heating the burners and having to keep on hand a number of mantles in case of clogging up by using gasoline, and you must take into consideration that gasoline is nowhere sold for illuminating purposes.

Where Acetylene is used to-day—On railroads the world over, in mines, as an emergency light, sea coasts, light houses on Canadian lakes—in fact it has taken the place of all other illuminants, except in cities where they have powerful electric plants installed.

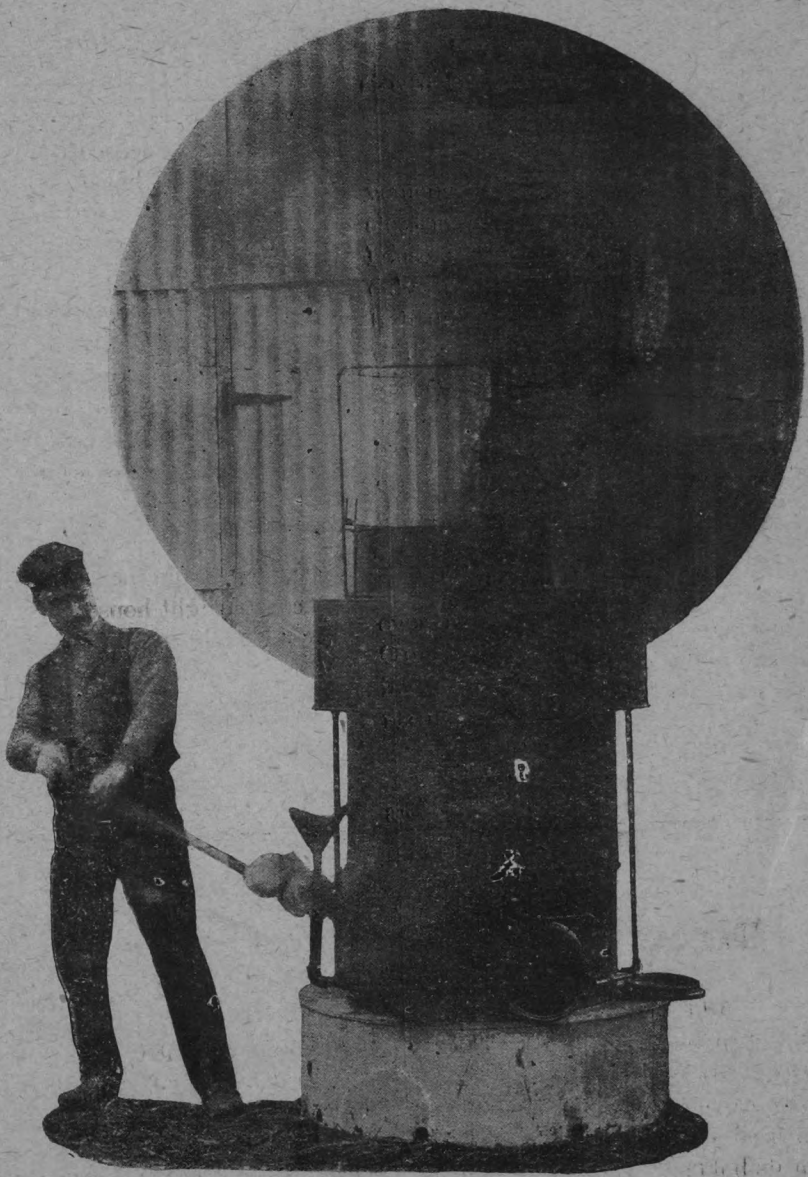
Remember it only takes the same time it would take to attend to one lamp to recharge our generator.

Directions as to Recharging.

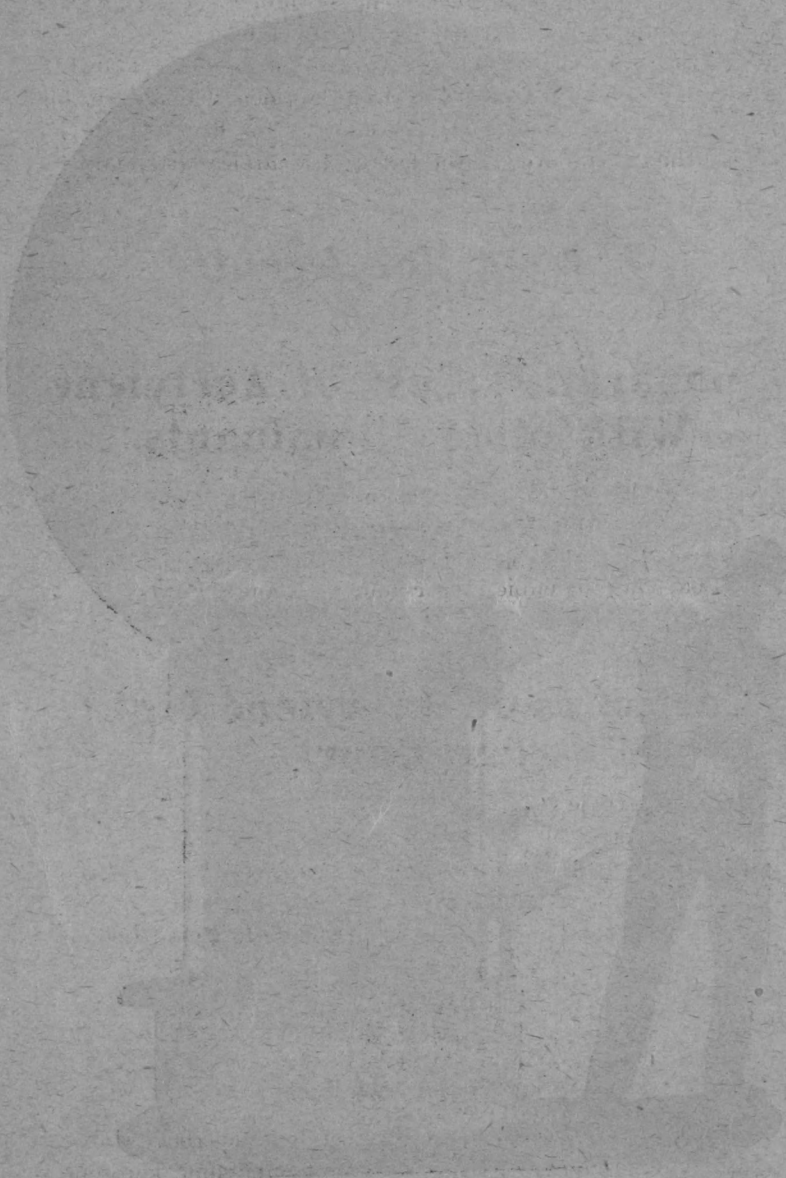
Add water to the supply tank; fill the tray one-third full of carbide, after first laying pieces of common paper in the tray; take off the door; draw out the tray; put in the one with carbide; screw on the door; see that the water is up in the seal at the base of the machine; and the syphon is hanging on its holder. Then all is ready. You will find that we have

the cleanest machine on the market,

having beaten our competitors especially for private dwellings



No. 3 Showing that no one can wreck the machine accidently or otherwise.



because: (1) There is no disturbing of lime in the building; (2) It is something entirely new in Acetylene; (3) It is a machine anyone can attend to, in fact it is often called a "woman's machine" because so many women manage without depending upon outside help (Note cut No. 6); (4) It is a machine that is safe even in the hands of a careless attendant.

A Boom for Agents.

Comparative Cost of Acetylene With other Illuminants.

Economy alone considered, comparisons are favorable to Acetylene, as will be seen from the following figures:

Acetylene, ½ cubic ft. per hour } Approximately 25
Coal Gas, 6½ cubic ft. per hour } Candle Power.

Cost of Each Acetylene Light Per Hour.

Carbide @ 3½c. per lb.	.35
Carbide @ 4c. per lb.	.40
Carbide @ 4½c. per lb.	.45
Carbide @ 5c. per lb.	.50

Acetylene—Average Cost of each light, 2-5-to ½ cts per hour.

Coal Gas $0.75 per M	.48
Coal Gas 1.00 per M	.65
Coal Gas 1.25 per M	.82
Coal Gas 1.50 per M	.95

Coal Gas—Average Cost of each light, ¾ cts per hour.

Taking the average cost of Acetylene as above stated, it compares favorably with inferior and troublesome kerosene at even 10¢ per gallon, whereas the higher tests of this oil do not reach the consumer at less than 14¢ or 15¢ per gallon.

When quality of the light, the real pleasure in having one's premises illuminated in such superior manner, and withal so cleanly and conveniently, enter into the consideration, then it is so decidedly in favor of Acetylene that there are hardly any comparisons to be made.

What is Acetylene?

To begin with, it is conceded that light produced by Acetylene is the nearest approach to sun light, and therefore superior to any other artificial light.

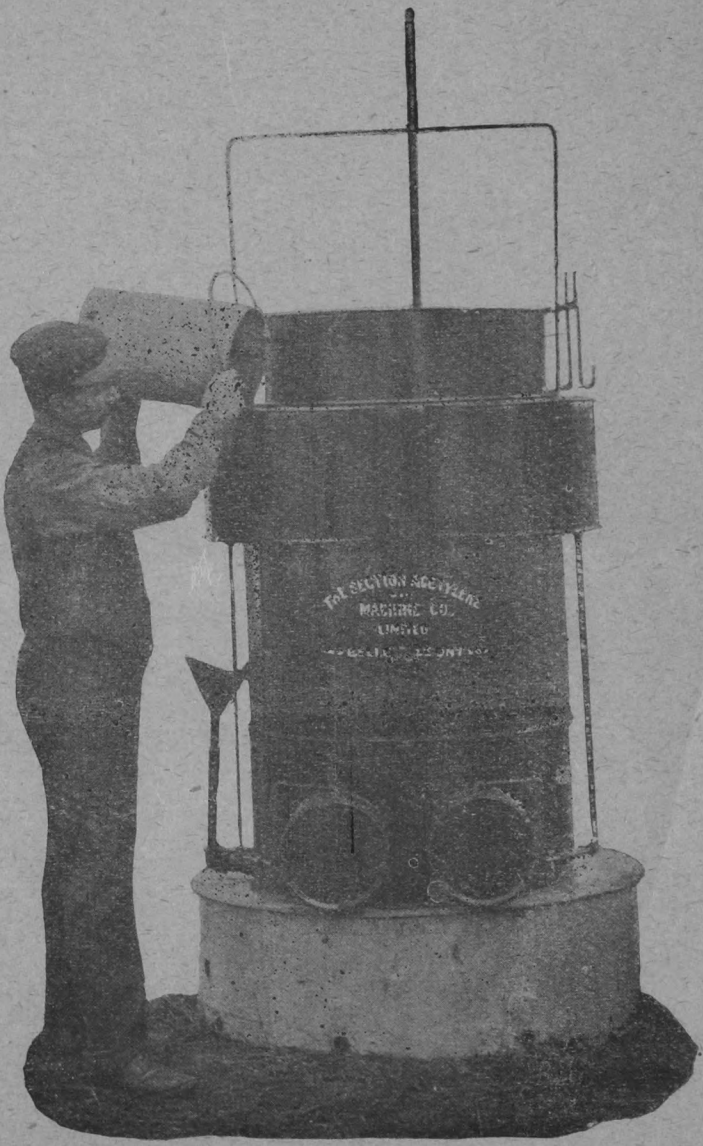
It was first discovered by an English chemist named Edwin Davy, in 1836, at which time it was introduced to the British Association. Chemically, acetylene is described as C 2 H 2. It is almost the same weight as air, its specific gravity being 93.

Although Acetylene was used for chemical purposes years ago, it was not until the year 1896 that it began to be used as an illuminant generally. In 1892 the process of manufacturing calcium carbide from charcoal and lime by means of electrical furnaces was discovered by an American, T. L. Wilson, who now operates a large plant at St. Catharines, Canada.

There are two large carbide plants in the United States, one at Niagara Falls, N. Y., another at Sault Ste. Marie, Mich. "Acetylene" is the gas (it is superfluous to say "Acetylene Gas," **Acetylene is Gas**) and carbide is the material from which it is produced. Chemically, the latter is written C a C 2 and is no more or less than lime and carbon, which have been electrically fused in proportions about as follows:—Coke 40 per cent; Lime 60 per cent; both of which are finely ground before being subjected to the electrical furnace. The carbide resembles flinty rock of a dark grayish color. It is not dissimilar to unslaked lime and will not burn in fire, nor "give off" Acetylene unless exposed to moisture. Carbide is very rich in Acetylene, and one pound of carbide will produce at least five feet of Acetylene.



No. 4. Showing the effect after firing.



No. 5. Showing it only takes one pail of water at the time of recharging one 20-light machine.



No. 6. Showing a lady can recharge it.

Expositor Office, Waskada